

I. AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) Nitrooxyderivatives or salts thereof of formula (I)



wherein

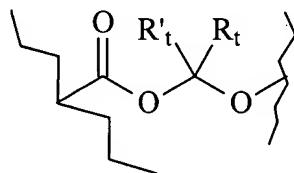
c0 is 1;

b0 is 0;

k0 is 0;

R_{1c} is H;

K is (CO) or the bivalent radical (1C) having the following formula:



(1-C)

wherein the carbonyl group is bound to T₁; R_t and R'_t, same or different, are H, C₁-C₁₀-alkyl, phenyl or benzyl, -COOR_y, in which R_y = H, C₁-C₁₀-alkyl, phenyl, benzyl;

T_B = -T_B-X₂-T_{BI}- wherein

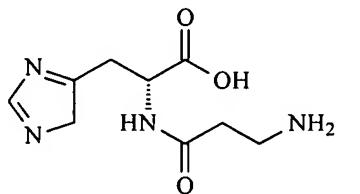
T_B = (CO) or X, in which X = O, S, NH;

T_{BI} = (CO) or (X), wherein X is as defined above;

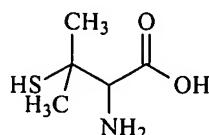
when c0 = 0, then T_{BI} = -O-;

X_2 is a bivalent bridging group, such as the corresponding precursor of B, having the formula $Z-T_B-X_2-T_{B1}-Z'$ in which Z and Z' are independently H or OH, is selected from the following compounds:

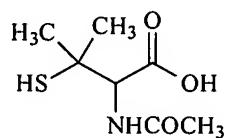
- Aminoacids: L-carnosine (CI), penicillamine (CV), N-acetylpenicillamine (CVI), cysteine (CVII), N-acetylcysteine (CVIII):



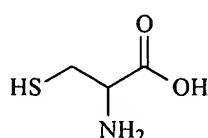
(CI)



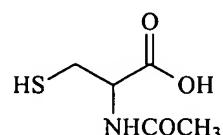
(CV)



(CVI)

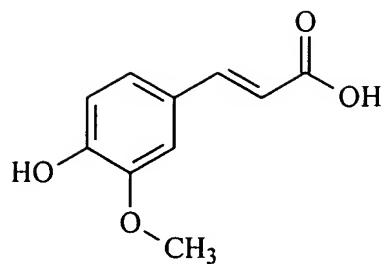


(CVII)

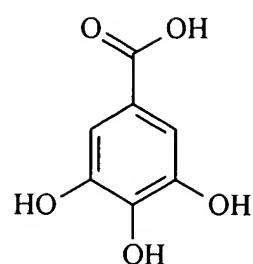


(CVIII)

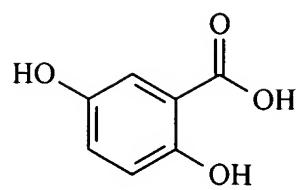
- Hydroxyacids: gallic acid (DI), ferulic acid (DII), gentisic acid (DIII), caffeic acid (DV), hydro caffeic acid (DVI), p-coumaric acid (DVII), vanillic acid (DVIII), syringic acid (DXI):



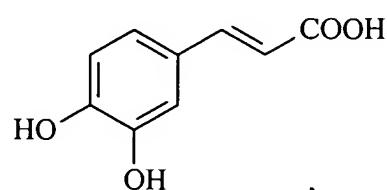
(DII)



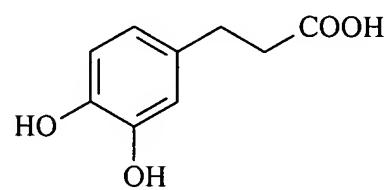
(DI)



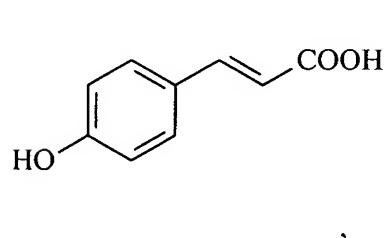
(DII)



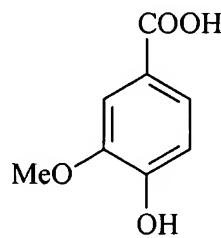
(DV)



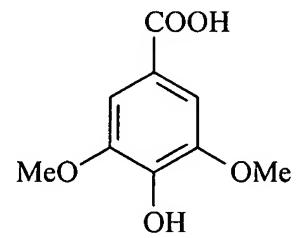
(DVI)



(DVII)

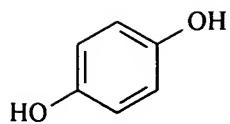


(DVIII)

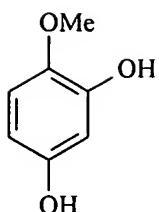


(DXI)

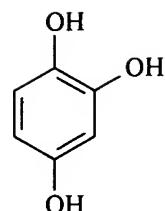
aromatic polyalcohols: hydroquinone (EVIII), methoxyhydroquinone (EXI), hydroxyhydroquinone (EXII), conyferyl alcohol (EXXXII), 4-hydroxyphenetyl alcohol (EXXXIII), p-coumaric alcohol (EXXXIV):



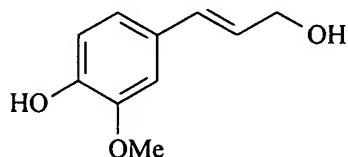
(EVIII)



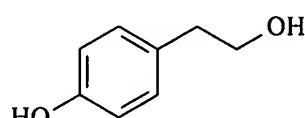
(EXI)



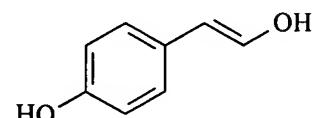
(EXII)



(EXXXII)



(EXXXIII)



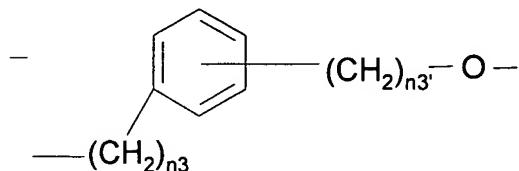
(EXXXIV)

C = bivalent radical of formula $-T_c-Y$

wherein

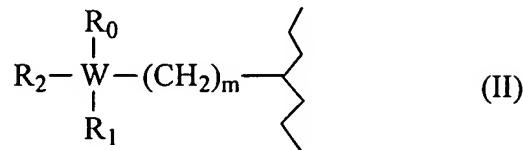
$T_c = (CO)$; and

Y is an alkyleneoxy group $-R'O-$ in which R' is straight or branched C₁-C₂₀, a cycloalkylene with from 5 to 7 carbon atoms, or



wherein n3 is an integer from 0 to 5 and n3' is an integer from 1 to 3;

R is a radical of an analgesic drug of formula (II):



wherein:

W is a carbon atom;

m is 1;

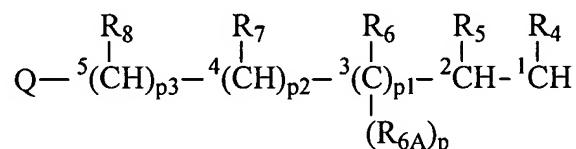
$R_0 = -(CH_2)_n-COOR_y$, wherein $R_y = H, C_1-C_{10}$ -alkyl, phenyl, or benzyl;

n is an integer of from 0 to 2;

$R_1 = H$;

R_2 is selected from the following groups:

- phenyl, optionally substituted with a halogen atom or with a group selected from - $OCH_3, -CF_3$, nitro;
- mono or dihydroxy-substituted benzyl;
- amidino group: $H_2N(C=NH)-$;
- a radical of formula (IIA), wherein optionally an ethylenic unsaturation may be present between the carbon atoms in position 1 and 2, or 3 and 4 or 4 and 5:



(IIA)

wherein:

p, p_1, p_2 are integers, same or different, and are 0 or 1;

p_3 in an integer of from 0 to 10;

R_4 is hydrogen, straight or branched C_1 - C_6 -alkyl, free valence;

R_5 is:

- hydrogen,
- straight or branched C_1 - C_6 -alkyl,
- C_3 - C_6 -cycloalkyl, or
- OR_A , wherein R_A is:
 - straight or branched C_1 - C_6 -alkyl, optionally substituted with one or more halogen atoms, or
 - phenyl optionally substituted with a halogen atom or with one of the following groups: $-OCH_3$, $-CF_3$, nitro;

R_6, R_{6A}, R_7, R_8 , the same or different, are H, methyl or free valence, with the proviso that when an ethylenic unsaturation is present between C_1 and C_2 in radical of formula (IIA), R_4 and R_5 are free valences able to form the double bond between C_1 and C_2 ; if the unsaturation is between C_3 and C_4 , R_6 and R_7 are free valence able to form the double bond between C_3 and C_4 ; if the unsaturation is between C_4 and C_5 , R_7 and R_8 are free valence able to form the double bond between C_4 and C_5 ;

Q is H, OH, OR_B, R_B being benzyl, straight or branched C₁-C₆-alkyl, optionally substituted with one or more halogen atoms, preferably F, phenyl optionally substituted with a halogen atom or with one of the following groups: -OCH₃, -CF₃, nitro; or

Q is:

- straight or branched C₁-C₆-alkyl,
- C₃-C₆-cycloalkyl,
- guanidino (H₂NC(=NH)NH-), or
- thioguanidino (H₂NC(=S)NH-),

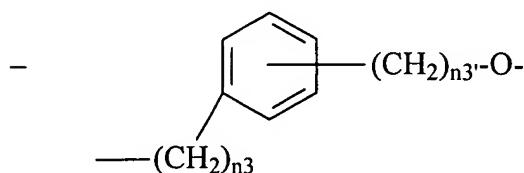
in formula (II) R₂ with R₁ and with W = C form together a C₄-C₁₀ saturated or unsaturated ring.

2. (Canceled)

3. (Previously Presented) Compounds according to claim 1, wherein in formula (I):

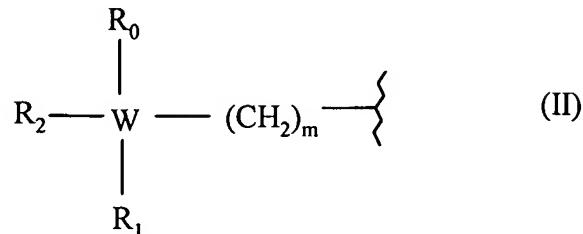
Y is:

an alkyleneoxy group -R'O- in which R' is straight or branched C₂-C₆ alkyl; or



wherein n3 is an integer from 0 to 3 and n3' is an integer from 1 to 3;

R is the radical of an analgesic drug of formula (II):



wherein:

W is a carbon atom;

m is 1;

R₀ = -(CH₂)_n-COOH, wherein n is an integer of from 0 to 2;

R₁ = H;

R₂ is selected from the following groups:

- 3,4-dihydroxybenzyl; or
- a radical of formula (IIA) as defined in claim 1, wherein:

p and p₁ are 0 or 1;

p₂ and p₃ are 0;

R₄ and R₅ are hydrogen, straight or branched C₁-C₆-alkyl or free valence;

R₆ and R_{6A} are H;

with the proviso that when an ethylenic unsaturation is present between C₁ and C₂ in radical of formula (IIA), R₄ and R₅ are free valences able to form the double bond between C₁ and C₂;

Q is H, CH₃ or

- guanidino (H₂NC(=NH)NH-), or

- thioguanidino ($\text{H}_2\text{NC}(=\text{S})\text{NH}-$);

in formula (II) R_2 with R_1 and with W form together a C_6 saturated ring.

4. (Previously Presented) Compounds according to claim 1, wherein when in formula (II) $\text{W} = \text{C}$, $\text{m} = 1$ and $\text{R}_0 = -(\text{CH}_2)_n\text{COOR}_y$, wherein $n = 1$ and $\text{R}_y = \text{H}$; R_2 and R_1 with W as defined above form the cyclohexane ring; the drug precursor of R having the formula $\text{R}-\text{NH}_2$ is known as gabapentin;

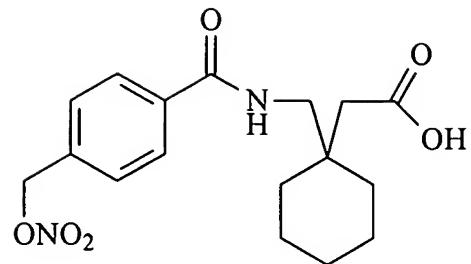
when in formula (II) $\text{W} = \text{C}$, $\text{m} = 1$ and R_0 if defined as for gabapentin with $n = 1$; $\text{R}_1 = \text{H}$; R_2 is the radical of formula (IIA) in which $\text{p} = \text{p}_1 = \text{p}_2 = \text{p}_3 = 0$, $\text{R}_4 = \text{H}$, $\text{R}_5 = \text{Q} = \text{CH}_3$; the drug precursor of R having the formula $\text{R}-\text{NH}_2$ is known as pregabalin;

when in formula (II) $\text{W} = \text{C}$ and has (S) configuration, $\text{m} = 1$ and R_0 if defined as for gabapentin with $n = 1$; $\text{R}_1 = \text{H}$; R_2 is the radical of formula (IIA) in which $\text{p} = \text{p}_1 = \text{p}_2 = \text{p}_3 = 0$, $\text{R}_4 = \text{H}$, $\text{R}_5 = \text{Q} = \text{CH}_3$; the drug precursor of R having the formula $\text{R}-\text{NH}_2$ is known as (S)3-isobutylGABA.

5. (Canceled)

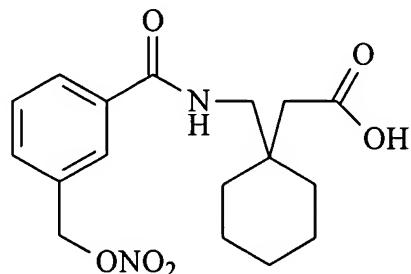
6. (Previously Presented) Compounds according to claim 1 selected from:

1-[4-(nitrooxymethyl)benzoylaminomethyl]-cyclohexaneacetic acid (XVA),



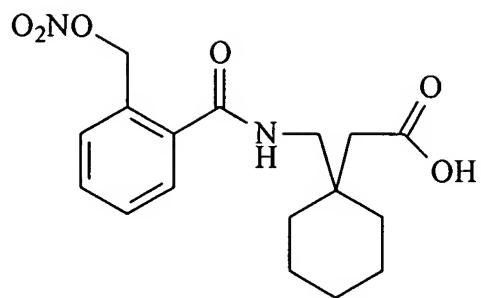
(XVA)

1-[3-(nitrooxymethyl)benzoylaminomethyl]-cyclohexaneacetic acid (XVIA),

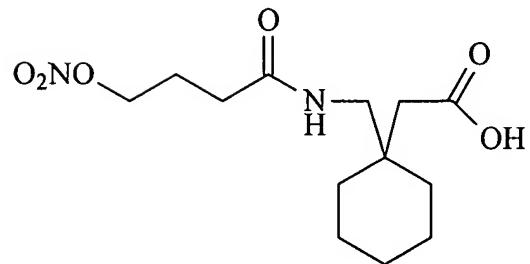


(XVIA)

1-[2-(nitrooxymethyl)benzoylaminomethyl]-cyclohexaneacetic acid (XVIIA),



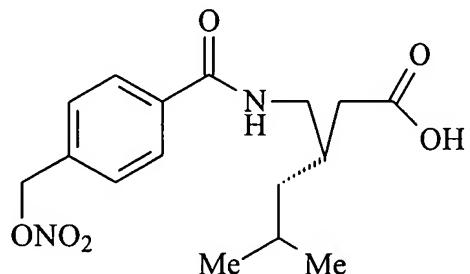
(XVIIA)



(XVIIIA)

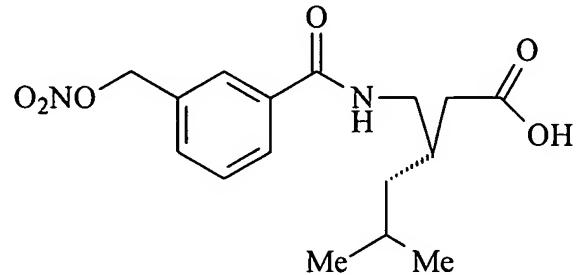
1-(4-nitrooxybutanoylaminomethyl)-cyclohexaneacetic acid (XVIIIA),

3-(S)-[4- (nitrooxymethyl)benzoylaminomethyl]-5-methyl-hexanoic acid (XXVA),

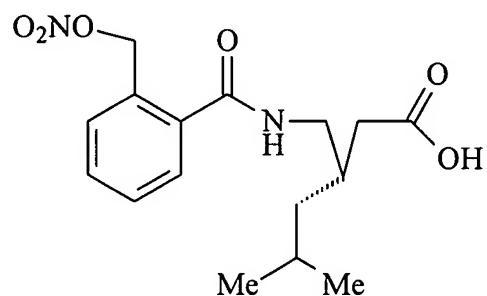


(XXVA)

3-(S)-[3-(nitrooxymethyl)benzoylaminomethyl]-5-methyl-hexanoic acid (XXVIA),



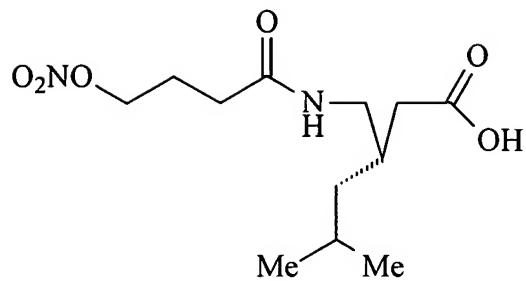
(XXVIA)



(XXVIIA)

3(S)-[2-(nitrooxymethyl)benzoylaminomethyl]-5-methyl-hexanoic acid (XXVIIA),

3(S)-[4-(nitrooxybutanoyl)aminomethyl]-5-methyl-hexanoic acid (XXVIIIA),



(XXVIIIA)

7. (Previously Presented) Compounds according to claim 1, in combination with NO-donor compounds.

8. (Original) Compounds according to claim 7, wherein the NO-donors contain in the molecule radicals of the following drugs: aspirin, salicylic acid, ibuprofen, paracetamol, naproxen, diclofenac and flurbiprofen.

9. (Previously Presented) Pharmaceutical compositions comprising compounds according to claim 1 as active ingredients.

10. (Canceled)

11. (Previously Presented) A method of treatment of chronic pain comprising administering an effective amount of the compounds according to claim 1.

12. (Previously Presented) The method according to claim 11, wherein the chronic pain is neurophatic pain.